

+

+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

O I P E J C 1 0 9
 JAN 21 2004
 PATENT & TRADEMARK OFFICE

Compleat if Known

(use as many sheets as necessary)

Sheet 1

1

of 5

Q

Application Number

10/721,151

Filing Date

11/24/2003

First Name

Roger A. Pyle, et al.

Group Art Unit

Examiner Name

Attorney Docket Number

109788.0008

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
RR		6,477,783		Harman, et al.		
RR		5,456,118		Hines, et al.		
RR		5,606,133		Hines, et al.		
RR		5,824,913		Pyle		
RR		5,817,946		Brovold		
RR		6,026,692		Brovold		
RR		5,323,655		Eagan, et al.		
RR		5,939,642		King, et al.		
RR		3,461,717		Dunlap, et al.		
RR		5,275,056		Hamilton, et al.		
RR		2,972,249		McRae, et al.		
RR		4,942,768		McRae		
RR		3,478,572		McRae		
RR		5,036,709		McRae		
RR		5,911,164		McRae		
RR		6,205,864		Vialletel, et al.		
RR		4,794,799		Paakkinen		
RR		4,930,346		Paakkinen, et al.		
RR		5,698,789		Lainio, et al.		
RR		4,087,918		Schmid, et al.		

[illegible]

RAEVI)

Date _____

Considered

7-2-04

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

+

+

+

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Complete if Known

(use as many sheets as necessary)

of 5

10/721,151

11/24/2003

Roger A. Pyle, et al.

109788.0008

[illegible][illegible]

NO COPY

RAEVIS

Considered

7-2-04

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

+

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/721,151
		Filing Date	11/24/2003
		First Named Inventor	Roger A. Pyle, et al.
		Group Art Unit	
		Examiner Name	
Sheet 3 of 5	Attorney Docket Number	109788.0008	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
RR	✓	TEST QUIP, "Operating Instructions for the Dynamic Angle Validation Kit (DAV) for Superpave Gyrotory Compactors", TestQuip Model DAV1, pgs. 1-40, NO DATE.	
RR	✓	DALTON, FRANK, "Gyrotory Compaction, The Significance of the Internal Angle of Gyration", pgs. 1-45, NO DATE.	
		"TRB Superpave Mixture & Aggregate Expert Task Group", 04/04/2001, pgs. 1-13.	
RR	✓	NCAT, "Evaluation of the Superpave Gyrotory Compactor's Internal Gyration Angle in Alabama", pgs. 1-31, NO DATE.	
RR	✓	PINE INSTRUMENT, "Investigation of FHWA SGC AVK #3 Guide Rod Play", 09/27/2000, pgs. 1-8.	
RR	✓	"Pressure Response Indicator HM-855", Last viewed on 10/17/2003, pg. 1, Gilson Company, Inc., http://www.globalgilson.com/sections/product/index.asp?pr_id=14171 .	
RR	✓	GULER, MURAT, et al., "Development of a Device for Measuring Shear Resistance of HMA in the Gyrotory Compactor", pgs. 1-24, Paper No. 00-1318, The Asphalt Research Group.	
RR	✓	"Gyrotory Asphalt Mixture Design Gyrotory Compactor Calibration", 04/04/2001, pgs. 1-2.	
RR	✓	"Raw Data from Recent Field Trials Using the Superpave Gyrotory Compactor Dynamic Angle Validator (DAV), prepared for the Superpave ETG Meeting, Tempe, Arizona, April 2-4, 2001.	
RR	✓	"Report 2001-01 Application of Internal Angle Verification to Obtain Equivalent Results from Various SGC Models, Pine Instrument Company, 08/23/2001, pgs. 1-9.	
RR	✓	"Report 2000-03 Investigation of Pine Superpave Gyrotory Compactors Using the FHWA Angle Validation Kit", Pine Instrument Company, 12/29/2000, pgs. 1-9.	

Examiner Signature	RAEJIS	Date Considered	7-2-04
--------------------	--------	-----------------	--------

¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

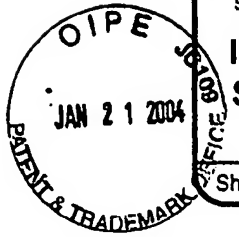
Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → +

PTO/SB/08B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 5

Complete if Known

Application Number	10/721,151
Filing Date	11/24/2003
First Named Inventor	Roger A. Pyle, et al.
Group Art Unit	
Examiner Name	
Attorney Docket Number	109788.0008

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T?
RR	✓	"Report 2000-02 Observations of SGC End Plate Deflection Using the FHWA Angle Validation Kit", Pine Instrument Company, 10/11/2000, pgs. 1-11.	
RR	✓	AL-KHATEEB, GHAZI, et al., "Target and Tolerance Study for the Angle of Gyration used in the Superpave Gyratory Compactor (SGC)", http://www.fhrc.gov/pavement/asphalt/labs/mixtures/target.htm , 08/22/2002, pgs. 1-16.	
RR	✓	Superpave Gyratory Validation Kit Manufacturer's Meeting, 08/31, pgs. 1-7.	
RR	✓	"Consideration of Mold Temperature When Measuring the Angle of Gyration on the Troxler Model 4140", October 2001, pgs. 1-6.	
RR	✓	"Measuring the Angle of Gyration on the Troxler Superpave Gyratory Compactor - SGC Using an Internal Angle Measuring Device", pgs. 1-4.	
RR	✓	"Troxler's Superpave Gyratory Compactor Operational Specifications", 02/01, pgs. 1-5.	
RR	✓	"Investigating Measurable Gmb Differences Among Gyratory Compacted Specimens", 05/01, pgs. 1-9.	
RR	✓	"FHWA Angle Kit Studies at Pine", pgs. 1-14.	
RR	✓	"Economic Impact Refining the Dynamic Internal Angle of the Superpave Gyratory Compactor", 1/29/03, pgs. 1-10.	
RR	✓	BUCHANAN, SHANE, M., et al., "Effect of Superpave Gyratory Compactor Type on Compacted Hot Mix Asphalt (HMA) Density", 01/7-11/01, pgs. 1-23.	
RR	✓	Pine Instrument Company, Report 2000-01", "Superpave Gyratory Compactors - Angle Sensitivity", 03/30/00, pgs. 1-9.	

Examiner
Signature

RAEWIS

Date

Considered

7-2-04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

† Unique citation designation number. ‡ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 5 of 5

Complete if Known

Application Number	10/721,151
Filing Date	11/24/2003
First Named Inventor	Roger A. Pyle, et al.
Group Art Unit	
Examiner Name	
Attorney Docket Number	109788.0008

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
RP	1	SCHIEBEL, BILL, "CDOT and Colorado Paving Industry's Action Plan to Address Recently Documented Issue with Compaction Angle...", 04/19/02, pgs. 1-16.	
RP	✓	"Model 3191 True Mold Angle Device for the Model 4141 Gyratory Compactor", pgs. 1-16.	
RP	✓	"Model 3190 True Mold Angle Device for the Model 4140 Gyratory Compactor", pgs. 1-20.	
		"Instruction Sheet SGC-Lead Simulator", 2003, pgs. 1-4, Pine Instrument Company.	
		"DAV2-Angle Measurement Without Mix", Test Quip Angle Validation Kit, pgs. 11-13, 36-41, Test Quip.	

Examiner
Signature

RAEvis

Date
Considered

7-2-04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.